

10 August 2007

SAFETY DATA SHEET

1. Identification

Product name: ADK-70 Digital Paper Processing

Catalogue number: 4ACP-4108DS

Supplier: CPAC ASIA Imaging Products LTD. 112 Moo9, Bangna-Trad Highway Km. 36, Bangwua, Bangpakong, Chachoengsao 24180 Thailand.

Emergency call: 001(6638)570966/9

2. Hazards identification

DANGER!

**HARMFUL IF ABSORBED THROUGH SKIN OR SWALLOWED CAUSES SKIN AND EYE IRRITATION
DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT MAY BE
HARMFUL IF INHALED MAY CAUSE ALLERGIC SKIN REACTION CAN CAUSE KIDNEY DAMAGE
AND CNS EFFECTS FOLLOWING INGESTION**

NFPA Hazard Ratings: Health - 3, Flammability - 1, Instability - 0

NOTE: NFPA 704 (2007) hazard indexes involve data review and interpretation that may vary among companies. It is intended only for rapid, general identification of the magnitude of the potential hazards. To adequately address safe handling, ALL information in this SDS must be considered.



3. Composition/information on ingredients

Component	CAS-No.	Weight %
Potassium Carbonate	584-08-7	6-11
p-Phenylenediamine derivative colordeveloping agent (CD-3)	25646-71-3	3-7
Diethylhydroxylamine	3710-84-7	1-5
Sodium Hydroxide	1310-73-2	1-5
Poly(ethylene) glycol	25322-68-3	1-5
Triisopropanolamine	122-20-3	1-5
Diethylenetriaminepentaacetic acid, pentasodium salt	140-01-2	1-5
Stilbene derivative	N/A	<1
Water	7732-18-5	57-86

4. First aid measures

Inhalation: If inhaled, move to fresh air. Get medical attention.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before re-use. Destroy or thoroughly clean contaminated shoes.

Ingestion: If swallowed, do NOT induce vomiting. Give victim a glass of water. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

5. Fire-fighting measures

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Fire or excessive heat may produce hazardous decomposition products.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides (NO_x), sulphur oxides, (see also Hazardous Decomposition Products section).

Unusual Fire and Explosion Hazards: None.

6. Accidental release measures

Methods for cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Avoid prolonged or repeated breathing of mist or vapor. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep away from heat and sources of ignition. Keep from contact with oxidizing materials.

Storage: Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls / personal protection

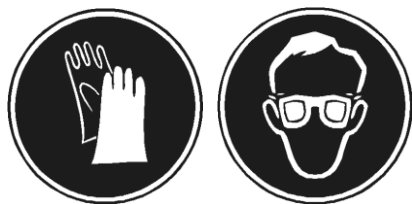
Ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator type: full-face organic vapour/N95. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

Eye protection: Wear safety glasses with side shields (or goggles).

Skin and body protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

Recommended Decontamination Facilities: Safety shower, eye wash, washing facilities as appropriate to condition of use.



9. Physical and Chemical Properties

Physical form: liquid

Color: orange

Odor: amine
Specific gravity: 1.15
Vapor pressure (at 20.0 °C (68.0 °F)): 24 mbar (18.0 mm Hg)
Vapor density: 0.6
Volatile fraction by weight: 70 - 80 %
Boiling point/range: > 100.0 °C (> 212.0 °F)
Water solubility: complete
pH: 13.3
Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions. No exotherm to 420 °C by DSC

Incompatibility: Strong oxidizing agents, Acids.

Hazardous decomposition products: nitrogen oxides (NO_x), sulphur oxides.

11. Toxicological information

Effects of Exposure

General advice:

Contains: p-Phenylenediamine derivative colordeveloping agent. May cause kidney damage based on animal data.

Contains: Diethylhydroxylamine. The toxicological properties of this material have not been fully investigated and its handling and use may present additional hazards.

Contains: Sodium hydroxide. The following exposure effects are based on pH of the solution, concentration of the base, and a review of the literature.

Inhalation: May be harmful if inhaled. Eyes: Causes eye irritation.

Skin: Harmful if absorbed through skin. May cause allergic skin reaction. Causes skin irritation.

Ingestion: Harmful if swallowed. May cause burns of the gastrointestinal tract if swallowed.

Data for Product:

Acute Toxicity Data:

Oral LD50 (rat): > 2,000 mg/kg

Skin irritation: slight

Data for Potassium carbonate (CAS 584-08-7):

Acute Toxicity Data:

Oral LD50: 2,570 mg/kg

Oral LD50 (rat): 1,870 mg/kg

Data for p-Phenylenediamine derivative colordeveloping (CAS 92-09-1):

Acute Toxicity Data:

Oral LD50 (rat): 200 mg/kg

Skin Sensitization (guinea pig): moderate (Causes sensitization on guinea-pigs.)

Definitions for the following section(s): LOEL =lowest-observed-effect level, LOAEL = lowest-observed-adverse-effect, NOAEL = no observed-adverse-effect level, NOEL =no-observed-effect level.

Repeated dose toxicity:

- Dermal (, mouse): ; 62 ml/kg/day

Data for Sodium hydroxide (CAS 1310-73-2):

Acute Toxicity Data:

Oral LD50 (rat): 50 - 400 mg/kg

Oral LD50 (rat): 100 - 200 mg/kg

Dermal LD50: 1,350 mg/kg

Skin irritation: Severe skin irritation

Eye irritation: Severe eye irritation

12. Ecological information

The following properties are ESTIMATED from the components of the preparations.

Potential Toxicity:

Toxicity to fish (LC50):	>10 - 100 mg/l
Toxicity to daphnia (EC50):	>10 - 100 mg/l
Toxicity to algae (IC50):	>10 - 100 mg/l
Toxicity to other organisms (EC50):	> 100 mg/l
Persistence and degradability:	Readily biodegradable
Chemical Oxygen Demand (COD):	ca. 1159 g/l
Biochemical Oxygen Demand (BOD):	ca. 122 g/l

13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

The information given below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions. Please consult the product packaging for further details.

IATA: Corrosive liquid, basic, inorganic, n.o.s., (Potassium Carbonate), UN 3266, Class 8, PKG Gr III.

Passenger aircraft Packing Instruction 818 max.5L

Cargo aircraft only Packing Instruction 820 max.60L

IMDG: CORROSIVE LIQUID BASIC, INORGANIC,N.O.S.(Potassium Carbonate), UN 3266, Class 8, PKG Gr III.

15. Regulatory information

Follow all applicable laws and regulations in your country.

16. Other regulations

The above information is believed to be accurate and represents the best information currently available to our company. However, our company makes no warranty with respect to such information, and our company assumes no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.



10 August 2007

SAFETY DATA SHEET

1. Identification

Product name: ADK-70 Digital Paper Processing

Catalogue number: 4ACP-4108BFS

Supplier: CPAC ASIA Imaging Products LTD. 112 Moo9, Bangna-Trad Highway Km. 36, Bangwua, Bangpakong, Chachoengsao 24180 Thailand.

Emergency call: 001(6638)570966/9

2. Hazards identification

WARNING!

MAY BE HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION DRIED PRODUCT RESIDUE CAN ACT AS A REDUCING AGENT.

NFPA Hazard Ratings: Health - 3, Flammability - 1, Instability - 0

NOTE: HMIS II and NFPA hazard indexes involve data review and interpretation that may vary among companies. They are intended only for rapid, general identification of the magnitude of the potential hazards. An asterisk (*), in the HMIS II health field, designates potential chronic or target organ hazards. To adequately address safe handling, ALL information in this MSDS must be considered.



3. Composition/information on ingredients

Component	CAS-No.	Weight %
Ferric Ammonium ethylenediaminetetraacetic acid	021265-50-9	15.20
Ammonium Thiosulfate	7783-18-8	20-25
Ammonium Bisulfite	17026-44-7	10-15
Water	7732-18-5	40-55

4. First aid measures

Inhalation: If inhaled, move to fresh air. Get medical attention if symptoms occur.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin: Wash off with soap and water. Get medical attention if symptoms occur.

Ingestion: If swallowed, only induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

5. Fire-fighting measures

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Fire or excessive heat may produce hazardous decomposition products.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides (NO_x), sulphur oxides, (see also Hazardous Decomposition Products section).

Unusual Fire and Explosion Hazards: Dried product residue can act as a reducing agent. Reacts violently with oxidizing materials. May cause spontaneous heating and ignition when absorbed on combustible, porous material (e.g. rags, paper, sawdust, cotton, clothing).

6. Accidental release measures

Methods for cleaning up: Collect in a noncombustible container for prompt disposal. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Avoid breathing mist or vapour at concentrations greater than the exposure limits. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials, highly oxygenated or halogenated solvents, organic compounds containing reducible functional groups. Remove and wash contaminated clothing promptly.

Storage: Store in original container. Keep container tightly closed to prevent the loss of water. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls / personal protection

Occupational exposure controls

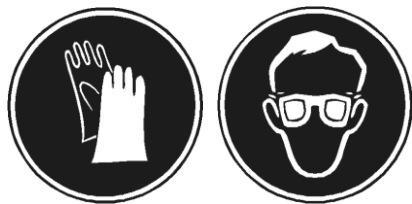
Ventilation: Good general ventilation should be used. Ventilation should be sufficient so that applicable occupational exposure limits are not exceeded. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances.

Respiratory protection: None should be needed. A respirator should be worn if hazardous decomposition products are likely to be or have been released. Respirator type: Acid gas. See Stability and Reactivity Section. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

Eye protection: Wear safety glasses with side shields (or goggles).

Skin and body protection: For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

Recommended Decontamination Facilities: Safety shower, eye wash, washing facilities as appropriate to condition of use.



9. Physical and Chemical Properties

Physical form: liquid

Color: dark red

Odor: slight ammonia

Specific gravity: 1.21

Vapor pressure (at 20.0 °C (68.0 °F)): 24 mbar (18.0 mm Hg)

Vapor density: 0.6
Volatile fraction by weight: 70 - 80 %
Boiling point/range: > 100.0 °C (> 212.0 °F)
Water solubility: complete
pH: 5.35
Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Acids, Strong bases, sodium hypochlorite (bleach), Oxidizing agents. Contact with sodium hypochlorite (bleach) may form chloramine (toxic gas). Contact with base liberates flammable material. Contact with base liberates ammonia.

Hazardous decomposition products: Ammonia, chloramine, sulphur oxides.

Hazardous Polymerization: Hazardous polymerization does not occur.

11. Toxicological information

Effects of Exposure

General advice:

Contains: Ammonium ferric ethylenediaminetetraacetic acid. This compound can chelate metals and may alter calcium and other cation balances.

Inhalation: Expected to be a low hazard for recommended handling. Some asthmatics or hypersensitive individuals may experience difficulty breathing if exposed to aerosols or decomposition products that are not anticipated during normal use.

Eyes: Causes eye irritation.

Skin: This material has a low potential to cause allergic skin reactions; however, cases of human skin sensitization have been reported.

Ingestion: May be harmful if swallowed. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.

Data for Ammonium thiosulphate (CAS 7783-18-8):

Acute Toxicity Data:

- Oral LD50 (male rat): 500 - 5,000 mg/kg

12. Ecological information

The following properties are ESTIMATED from the components of the preparations.

Potential Toxicity:

Fish LC50: > 100 mg/l

Daphnid EC50: 10 - 100 mg/l

Algal IC50: > 100 mg/l

Waste treatment organisms EC50: > 100 mg/l

COD (approximate): 207 g/l

BOD (approximate): 99 g/l

13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

Not regulated for all modes of transportation.

15. Regulatory information

Follow all applicable laws and regulations in your country.

16. Other regulations

The above information is believed to be accurate and represents the best information currently available to our company. However, our company makes no warranty with respect to such information, and our company assumes no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.



10 August 2007

SAFETY DATA SHEET

1. Identification

Product name: ADK-70 Digital Paper Processing

Catalogue number: 4ACP-4108RS

Supplier: CPAC ASIA Imaging Products LTD. 112 Moo9, Bangna-Trad Highway Km. 36, Bangwua, Bangpakong, Chachoengsao 24180 Thailand.

Emergency call: 001(6638)570966/9

2. Hazards identification

WARNING!

HARMFUL IF SWALLOWED

CAUSES SEVERE EYE IRRITATION

CAUSES SKIN IRRITATION

MAY CAUSE ALLERGIC SKIN REACTION

MIST OR VAPOR IRRITATING TO EYES AND RESPIRATORY TRACT

NFPA Hazard Ratings: Health - 3, Flammability - 0, Instability - 0

NOTE: NFPA 704 (2007) hazard indexes involve data review and interpretation that may vary among companies. It is intended only for rapid, general identification of the magnitude of the potential hazards. To adequately address safe handling, ALL information in this SDS must be considered.



3. Composition/information on ingredients

Component	CAS-No.	Weight %
Disodium EDTA	6381-92-6	1-5
Sodium hydroxide	1310-73-2	1-2
Stilbene derivative	N/A	<1
Water	7732-18-5	92-98

4. First aid measures

Inhalation: If inhaled, move to fresh air. Get medical attention if symptoms occur.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash contaminated clothing before reuse.

Destroy or thoroughly clean contaminated shoes.

Ingestion: Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. Fire-fighting measures

Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Hazardous Combustion Products: None (noncombustible)

Unusual Fire and Explosion Hazards: None.

6. Accidental release measures

Methods for cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Avoid breathing mist or vapour. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: No special technical protective measures required.

Storage: Keep container tightly closed.

8. Exposure controls / personal protection

Occupational exposure controls: Not established

Ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level.

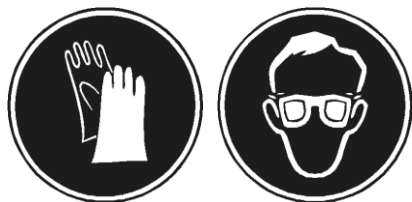
Respiratory protection: If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. Respirator type: full-face positive-pressure airsupplied.

If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

Eye protection: Wear safety glasses with side shields (or goggles) and a face shield.

Skin and body protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

Recommended Decontamination Facilities: Safety shower, eye wash, washing facilities as appropriate to condition of use.



9. Physical and Chemical Properties

Physical form: liquid

Color: light yellow

Odor: odorless

Specific gravity: 1.03

Vapor pressure (at 20.0 °C (68.0 °F)): 24 mbar (18.0 mm Hg)

Vapor density: 0.6

Volatile fraction by weight: 90 %

Boiling point/range: > 100.0 °C (> 212.0 °F)

Water solubility: complete

pH: 7.3

Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: None with common materials and contaminants with which the material may reasonably come into contact.

Hazardous decomposition products: None under normal conditions of use.

Hazardous Polymerization: Hazardous polymerization does not occur.

11. Toxicological information

Effects of Exposure

Inhalation: Airborne dust/mist/vapor irritating.

Eyes: Causes severe eye irritation. Airborne dust/mist/vapor irritating.

Skin: Causes skin irritation. May cause allergic skin reaction based on human experience.

Ingestion: Harmful if swallowed. May cause burns of the gastrointestinal tract if swallowed.

12. Ecological information

The following properties are ESTIMATED from the components of the preparations.

Potential Toxicity:

Toxicity to fish (LC50): > 100 mg/l

Toxicity to daphnia (EC50): > 100 mg/l

Toxicity to algae (IC50): > 100 mg/l

Toxicity to other organisms (EC50): > 100 mg/l

Persistence and degradability: Readily biodegradable

Chemical Oxygen Demand (COD): 15 g/l

Biochemical Oxygen Demand (BOD): 5 g/l

13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

Not regulated for all modes of transportation.

15. Regulatory information

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16. Other regulations

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